

LATERAL FET STRUCTURE WITH IMPROVED BLOCKING VOLTAGE AND ON  
RESISTANCE PERFORMANCE

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Abstract of the Disclosure

In one embodiment, a lateral FET cell is formed in a body of semiconductor material. The body of semiconductor material includes alternating layers of opposite conductivity type that extend between a trench drain region and a trench gate structure. The trench gate structure controls at least one sub-surface channel region. The body of semiconductor material provides sub-surface drift regions to reduce on resistance without increasing device area.

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